

IN THE CLAIMS

1. (Currently Amended) A storage subsystem comprising a plurality of storage devices connected to a host computer, wherein

a first storage device included in said plurality of storage devices comprises:

means for receiving a request for information processing for said storage subsystem, said information processing being executed in said host computer;

means for transferring the received request to a second storage device included in said plurality of storage devices; and

means for executing information processing indicated by the received request when the received request should be executed by said first storage device based on cooperation control information which indicates a-the request to be executed by the first storage device,

wherein each of the plurality of storage devices control RAID level cooperatively.

2. (Currently Amended) The storage subsystem according to claim 1, wherein the first and second storage devices control RAID level 1, and

wherein if the request is a data write request, the

second storage device requests the first storage device to send stored data to be stored along stored data connection with the data write request to the second storage device and stores data sent from the first storage device.

3. (Previously Presented) The storage subsystem according to claim 2, wherein

the request includes first information indicating an address of a memory area made from the plurality of storage devices that should be executed by the information processing, and the cooperation control information includes second information identifying an area of said first storage device of the memory area of the plurality of storage devices; and
said means for executing information processing executes the information processing when the first information and the second information match.

4. (Currently Amended) The storage subsystem according to claim 1, wherein

said second storage device comprises:
means for receiving the transferred request; and
means for executing information processing indicated by the transferred request when the transferred request should be executed by said second storage device based on the cooperation control information which indicates a request to

be executed by said second storage device,

wherein the first and second storage device control RAID level 4 or 5,

wherein, if the request is a data write request, the first storage device receives data connection with the data write request, stores the data, makes another data to be used for making parity data in the second storage device and sends the another data to be the second storage device,

wherein the second storage device received-receives the another data, makes parity data based on the another data, and stores the parity data.

5. (Original) The storage subsystem according to claim 4, wherein

in said first storage device, said means for transferring a request adds information, which indicates said first storage device, to the request to be transferred; and

said second storage device further comprises means for suppressing another transfer of the transferred request based on the added information that indicates said first storage device.

6. (Currently Amended) The storage subsystem according to claim 1, further comprising a third storage device of the plurality of storage devices which are connected to the second

storage device, wherein the first, second and third storage devices control RAID level 4 or 5,

wherein, if the request is a data write request, the first storage device receives data connection with the data write request and stores the data, makes another data to be used for making parity data in the third storage device and sends the another data to the second storage device,

the second storage device receives the another data, makes second another data to be used for making parity data in the third storage device and sends the another data and second another data to the third storage device,

wherein the third storage device receives the another data and the second another data, makes parity data based on the another data and the second another data, and stores the parity data.

7. (Previously Presented) The storage subsystem according to claim 6, wherein said means for transferring a request transfers the received request to said second storage device when it is judged that said second storage device should execute the received request,

wherein, if the request is a data read request, the first storage device receives the data read request, reads first data requested by the data read request, and sends the first data to the second storage device,

the second storage device receives the first data and the data read request, reads second data requested by the data read request, merges the first and second data and sends the merged data to the host computer.

8. (Previously Presented) The storage subsystem according to claim 7, wherein

the request includes first information indicating an address of a memory area made from the plurality of storage devices that should be executed by the information processing, and the cooperation control information includes second information identifying an area of said first storage device of the memory area of the plurality of storage devices; and
said means for executing information processing executes the information processing when the first information and the second information match.

9. (Currently Amended) A storage subsystem comprising a plurality of storage devices connected to a host computer, wherein

a first storage device included in said plurality of storage devices comprises:

a receiver connected to the host computer, for receiving a request for information processing for said storage subsystem;

a transceiver connected to said receiver and a second storage device included in the plurality of storage devices, for transferring the received request to the second storage device; and

a processor for executing the information processing indicated by the received request when the received request should be executed by said first storage device based on cooperation control information which indicates ~~a request to be executed~~ the request to be executed by the first storage device,

wherein each of the plurality of storage devices control RAID level cooperatively.

10. (Previously Presented) The storage subsystem according to claim 9, wherein the first and second storage devices control RAID level 1,

wherein if the request is a data write request, the first and second storage device receives data connection with the data write request and stores data sent from the host computer synchronously.

11. (Previously Presented) The storage subsystem according to claim 10, wherein

the request includes first information indicating an address of a memory area made from the plurality of storage

devices that should be executed by the information processing, and the cooperation control information includes second information identifying an area of said first storage device of the memory area of the plurality of storage devices; and
said processor executes the information processing when the first information and the second information match.

12. (Previously Presented) The storage subsystem according to claim 9, further comprising a third storage device included in the plurality of the storage devices which connected to the second storage device, wherein

said third storage device comprises:

a second receiver connected to said transceiver for receiving the transferred request; and

a second processor connected to said second receiver for executing the information processing indicated by the transferred request when the transferred request should be executed by said third storage device based on the cooperation control information which indicates a request to be executed,

wherein the first, second and third storage devices control RAID level 4 or 5,

wherein if the request is a data write request and the second storage device fails, the first storage device receives data connection with the data write request, stores the data, makes another data to be used for making parity data

in the third storage device and sends the another data to the third storage device,

wherein the third storage device receives the another data, makes parity data based on the another data, and stores the parity data.

13. (Original) The storage subsystem according to claim 12, wherein

in said first storage device, said transceiver adds information, which indicates said first storage device, to the request to be transferred; and

said second processor suppresses another transfer of the transferred request based on the added information that indicates said first storage device.

14. (Previously Presented) The storage subsystem according to claim 9, further comprising a third storage device of the plurality of storage devices which are connected to the second storage device, wherein, if the request is a data write request, the first storage device receives data connection with the data write request, stores the data, makes another data to be used for making parity data in the third storage device and sends the another data to the second storage device,

the second storage device receives the another data

makes second another data to be used for making parity data in the third storage device and sends the another data and the second another data to the third storage device,

wherein the third storage device receives the another data and the second another data, makes parity data based on the another data and the second another data, and stores the parity data.

15. (Previously Presented) The storage subsystem according to claim 14, wherein said transceiver transfers the received request to said second storage device when it is judged that said second storage device should execute the received request, based on cooperation control information indicating a request to be executed by said first storage device, and the received request,

wherein, if the request is a data read request and the second storage device fails, the first storage device receives the data read request, reads first data requested by the data read request and sends the first data to the third storage device,

the third storage device receives the first data and the data read request, reads parity data connection with the data read request, constructs second data stored in the second storage devices based on the parity data, merges the first and second data and sends the merged data to the host computer.

16. (Previously Presented) The storage subsystem according to claim 15, wherein

the request includes first information indicating an address of a memory area made from the plurality of storage devices that should be executed by the information processing, and the cooperation control information includes second information identifying an area of said first storage device of the memory area of the plurality of storage devices; and

said processor executes the information processing when the first information and the second information match.

17. (Original) A storage control method which uses a storage subsystem comprising a plurality of storage devices connected to a host computer and includes a first storage device, wherein

said first storage device executes:

a step of receiving a request for information processing for said storage subsystem, said information processing being executed in said host computer;

a step of transferring the received request to a second storage device included in said plurality of storage devices; and

a step of executing information processing indicated by the received request when the received request should be

executed by said first storage device based on cooperation control information which indicates a request to be executed by the first storage device,

wherein each of the plurality of storage devices control RAID level cooperatively.

18. (Previously Presented) The storage control method according to claim 17, wherein the first and second storage devices control RAID level 1, and

wherein if the request is a data write request, the second storage device requests the first storage device to send stored data connection with the data write request to the second storage device and stores data sent from the first storage device.

19. (Previously Presented) The storage control method according to claim 17, wherein

the request includes first information indicating an address of a memory area made from the plurality of storage devices that should be executed by the information processing, and the cooperation control information includes second information identifying an area of said first storage device of the memory area of the plurality of storage devices; and

said step of executing information processing executes the information processing when the first information

and the second information match.

20. (Original) The storage control method according to claim 17, wherein

said second storage device executes:

a step of receiving the transferred request; and

a step of executing information processing indicated by the transferred request when the transferred request should be executed by said second storage device based on the cooperation control information which indicates a request to be executed by said second storage device,

wherein the first and second storage device control RAID level 4 or 5,

wherein, if the request is a data write request, the first storage device receives data connection with the data write request, stores the data, makes another data to be used for making parity data in the second storage device and sends the another data to the second storage device,

wherein the second storage device received the another data, makes parity data based on the another data, and stores the parity data.

21. (Original) The storage control method according to claim 20, wherein

in said first storage device, said step of

transferring a request adds information, which indicates said first storage device, to the request to be transferred; and said second storage device further executes a step of suppressing another transfer of the transferred request based on the added information that indicates said first storage device.

22. Canceled.

23. (Previously Presented) The storage control method according to claim 17, wherein the first, second and third storage devices control RAID level 4 or 5,

wherein, if the request is a data write request, the first storage device receives data connection with the data write request and stores the data, makes another data to be used for making parity data in the third storage device and sends the another data to the second storage device,

the second storage device receives the another data, makes second another data to be used for making parity data in the third storage device and sends the another data and second another data to the third storage device,

wherein the third storage device receives the another data and the second another data, makes parity data based on the another data and the second another data, and stores the parity data.

24. (Previously Presented) The storage control method according to claim 23, wherein

the request includes first information indicating an address of a memory area made from the plurality of storage devices that should be executed by the information processing, and the cooperation control information includes second information identifying an area of said first storage device of the memory area of the plurality of storage devices; and
said step of executing information processing executes the information processing when the first information and the second information match.

25. (Previously Presented) A storage subsystem comprising a plurality of storage devices connected to a host computer, wherein:

a first storage device included in said plurality of storage devices comprises:

means for receiving a request for information processing for said storage subsystem, said information processing being executed in said host computer;

means for transferring the received request to a second storage device included in said plurality of storage devices;

means for executing information processing indicated by the received request when the received request should be executed by said first storage device;

said second storage device comprises:

means for receiving the transferred request; and

means for executing information processing indicated by the transferred request when the transferred request should be executed by said second storage device;

in said first storage device, said means for transferring a request adds information, which indicates said first storage device, to the request to be transferred; and

said second storage device further comprises means for suppressing another transfer of the transferred request based on the added information that indicates said first storage device.

26. (Previously Presented) A storage subsystem comprising a plurality of storage devices connected to a host computer, wherein:

a first storage device included in said plurality of storage devices comprises:

a receiver connected to the host computer, for receiving a request for information processing for said storage subsystem, said information processing being executed

in said host computer;

a transceiver connected to said receiver and a second storage device included in the plurality of storage devices, for transferring the received request to the second storage device; and

a processor for executing the information processing indicated by the received request when the received request should be executed by said first storage device;

said second storage device comprises:

a second receiver connected to said transceiver for receiving the transferred request; and

a second processor connected to said second receiver for executing the information processing indicated by the transferred request when the transferred request should be executed by said second storage device;

in said first storage device, said transceiver adds information, which indicates said first storage device, to the request to be transferred; and

said second processor suppresses another transfer of the transferred request based on the added information that indicates said first storage device.

27. (Previously Presented) A storage control method which uses a storage subsystem comprising a plurality of storage devices connected to a host computer and includes a first storage device, wherein

said first storage device executes:

a step of receiving a request for information processing for said storage subsystem, said information processing being executed in said host computer;

a step of transferring the received request to a second storage device included in said plurality of storage devices; and

a step of executing information processing indicated by the received request when the received request should be executed by said first storage device;

said second storage device executes:

a step of receiving the transferred request; and

a step of executing information processing indicated by the transferred request when the transferred request should be executed by said second storage device;

in said first storage device, said step of

transferring a request adds information, which indicates said first storage device, to the request to be transferred; and said second storage device further executes a step of suppressing another transfer of the transferred request based on the added information that indicates said first storage device.